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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,685	02/16/2005	Etienne Dunas	Q83961	4008
72875	7590	04/17/2008	EXAMINER	
SUGHRUE MION, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037			HO, HUY C	
			ART UNIT	PAPER NUMBER
			2617	
			NOTIFICATION DATE	DELIVERY MODE
			04/17/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/510,685	Applicant(s) DUNAS ET AL.	
	Examiner HUY C. HO	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/31/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2007 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The amended drawings were received on 12/31/2007 do not comply with the examiner's previous request for correction. These drawings are still held in objection for reasons of not being informatively descriptive. Figures 1-2 need some relevant information descriptions in numeral boxes 1-7, 21. Figures 3-4 need relevant information descriptions in numeral boxes 70-79. Correction is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. **Claim 1** provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of Copending Application No. **10/510,690**.

This is a provisional obviousness-type double patenting rejection.

Consider claim 1, (Currently amended) Copending Application No. **10/510,690** discloses a satellite-based monitoring, measurement or data collection system, comprising:

a monitoring, measurement or data collection system having a plurality of monitoring stations (4) for remote monitoring, measurement or data collection and for providing data, to respective computation centers (3) (**Claim 1: a satellite based augmentation system having at least one monitoring ground stations (MGS) for determining a level of error of a satellite (NS) broadcasting positioning signals and at least one navigation computation center (2));**

a satellite system using at least one satellite (2) having an on-board processor for multiplexing up-link data received and broadcasting said multiplexed data in a down-link transmission; (**claims 1 and 3: a digital satellite system using at least one digital satellite (DS) broadcasting, on-board said digital satellite (DS));**

~~characterized in that~~ wherein said up-link data received by said satellite (2) comprises a digital channel corresponding to a respective one of said computation centers (3) (**claims 1, 2, 6: to at least one down-link frame adapter (7) for demultiplexing and retrieving said navigation correction data from said at least one digital satellite down-link transmission, at least one of said navigation computation center (2) is connected to an up-link frame adapter (3) for framing said navigation correction data into a format and rate adapted for digital up-link transmission through said digital satellite (DS));**

said respective computation center (3) is connected to a down-link adapter (7) connected to a receiver or group of receivers (6) (**claims 1 and 2: to at least one down-link frame adapter (7) for demultiplexing and retrieving said navigation correction data from said at least one digital satellite down-link transmission, at least one of said navigation computation center (2) is connected to an**

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up-link frame adapter (3) for framing said navigation correction data into a format and rate adapted for digital up-link transmission through said digital satellite (DS));

said down-link adapter is adapted for extracting, from said down-link transmission, ~~only~~ said digital channel corresponding only to the said respective computation center (3) (claims 1, 2, 10: to at least one down-link frame adapter (7) for demultiplexing and retrieving said navigation correction data from said at least one digital satellite down-link transmission, at least one of said navigation computation center (2) is connected to an up-link frame adapter (3) for framing said navigation correction data into a format and rate adapted for digital up-link transmission through said digital satellite (DS), down-link frame adapter (7) is adapted for extracting from said satellite down-link transmission data related to time or other specific data).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. **Claims 1-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Morales-Garza (5,101,267)** and further in view of **Lazaris-Brunner et al. (6,498,922)**.

Consider claim 1, (Currently amended) Morales-Garza discloses a satellite-based monitoring, measurement or data collection system (**see the abstract**), comprising:

a monitoring, measurement or data collection system having a plurality of monitoring stations (4) for remote monitoring, measurement or data collection and for providing data, to respective computation centers (3) (**see figure 1, col 3 lines 21-30**) and;

a satellite system using at least one satellite (2) having an on-board processor for multiplexing (**see figure 1, col 3 lines 21-30, col 4 lines 28-40**):

up-link data received and broadcasting said multiplexed data in a down-link transmission (**figure 1, col 3 lines 21-45**); ~~characterized in that wherein:~~

said up-link data received by said satellite (2) comprises a digital channel corresponding to a respective one of said computation centers (3)(**see figure 1, col 3 lines 21-60, col 4 lines 28-40**);

said respective computation center (3) is connected to a down-link adapter (7) connected to a receiver or group of receivers (6) (**figure 1, col 3 lines 21-45**); and

said down-link adapted for extracting, from said down-link transmission, ~~only~~ said digital channel corresponding only to the said respective computation center (3) (**figure 1, col 3 lines 21-60, col 4 lines 28-40**).

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Morales-Garza does not specifically show the function of an adapter of extracting digital channel, however it is noticeable Morales-Garza discusses various components such as splitters for providing suitable presentation format on the TV set, channel modulator for converting appropriate format information to present to viewers and sets the equipment to accept corresponding responses from the viewer unit (see col 5 lines 5-12). Lazaris-Brunner discusses a multi-beam direct digital broadcast satellite system providing programs for users, where there exists a formatting processor converting information to appropriate formats from downlink beams for direct transmission to users (see the abstract, col 3 lines 10-55, col 7 lines 1-13), thus Lazaris-Brunner discloses the function of an adapter in extracting multi beam channel and converting signals to proper formats.

Since Morales-Garza and Lazaris-Brunner teach wireless data communication network linked with satellites, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Morales-Garza, and have the function of an adapter of extracting digital channel, taught by Lazaris-Brunner, to improve the system discussed by Morales-Garza (see col 1 lines 5-67).

Consider claim 14, (Currently Amended) Morales-Garza discloses a method for interconnecting elements of a monitoring, measurement or data collection using a satellite system (see the abstract), comprising:

remote monitoring, measurement or data collection by means of a plurality of monitoring stations (4) and providing data to respective computation centers (3) (see figure 1, col 3 lines 21-30) and

at least one satellite (2) of said system multiplexing up-link data by means of an on-board processor and broadcasting said multiplexed data in down-link transmission (figure 1, col 3 lines 21-45); ~~characterized by the further steps of:~~

transmitting a digital channel in said up-link data to said satellite (2), said channel corresponding to a respective computation center (3), said computation center (3) being connected to a down-link (7) connected to a satellite receiver or a group of satellite receivers (6) (figure 1, col 3

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lines 21-60, col 4 lines 28-40); and

extracting from said down-link transmission, by said down-link, only said digital channel corresponding to the respective computation center (3) (**figure 1, col 3 lines 21-60, col 4 lines 28-40**).

Morales-Garza does not specifically show the function of an adapter of extracting digital channel, however it is noticeable Morales-Garza discusses various components such as splitters for providing suitable presentation format on the TV set, channel modulator for converting appropriate format information to present to viewers and sets the equipment to accept corresponding responses from the viewer unit (**see col 5 lines 5-12**). Lazaris-Brunner discusses a multi-beam direct digital broadcast satellite system providing programs for users, where there exists a formatting processor converting information to appropriate formats from downlink beams for direct transmission to users (**see the abstract, col 3 lines 10-55, col 7 lines 1-13**), thus Lazaris-Brunner discloses the function of an adapter in extracting multi beam channel and converting signals to proper formats.

Since Morales-Garza and Lazaris-Brunner teach wireless data communication network linked with satellites, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify the teachings of Morales-Garza, and have the function of an adapter of extracting digital channel, taught by Lazaris-Brunner, to improve the system discussed by Morales-Garza (**see col 1 lines 5-67**).

Consider claim 2, (Original) A system according to claim 1, Morales-Garza, modified by Lazaris-Brunner, further discloses wherein each of said monitoring stations (4) is connected through an up-link adapter (5) to the satellite up-link broadcasting station (1) (**figure 1, col 3 lines 21-30**).

Consider claim 3, (Previously Presented) A system according to claim 1, Morales-Garza, modified by Lazaris-Brunner, discloses wherein said satellite system is a digital direct broadcast satellite system (**col 3 lines 30-55, col 4 lines 40-67**).

Consider claim 4, (Previously Presented) A system according to claim 1, Morales-Garza, modified by Lazaris-Brunner, further discloses wherein at least one of said monitoring stations (4) has

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at least one channel from the up-link transmission allocated thereto (**figure 1, col 3 lines 21-30, col 4 lines 28-40**).

Consider claim 5, (Original) A system according to claim 4, Morales-Garza, modified by Lazaris-Brunner, discloses wherein several remote channels, or several monitoring stations (4) are grouped together using sub-multiplexing channel capabilities of said digital direct broadcast satellite system (**col 3 lines 30-55, col 4 lines 40-67**).

Consider claim 6, (Previously Presented) A system according to claim 1, Morales-Garza, modified by Lazaris-Brunner, further discloses wherein a monitoring station (4) has a receiver for synchronizing message transmission using data extracted from said down-link channel multiplex content (**col 1 lines 40-45, col 2 lines 30-40**).

Consider claim 7, (Previously Presented) A system according to claim 1, Morales-Garza, modified by Lazaris-Brunner, further discloses wherein time and/or date is broadcast to said down-link adapters (7), and optionally to said digital direct broadcast satellite receivers (6) (**col 1 lines 50-56, 64-67, col 2 lines 8-30**).

Consider claim 8, (Original) Morales-Garza, modified by Lazaris-Brunner, discloses A down-link adapter for extracting at least one channel from a down-link transmission as claimed in claim 1 (**col 3 lines 10-55, col 7 lines 1-13**).

Consider claim 9, (Original) Morales-Garza, modified by Lazaris-Brunner, discloses A down-link adapter according to claim 8 for converting data framing from said satellite down-link data channel rate to message format and/or converting data rate to rate adapted to a cyclic data rate of said monitoring, measurement or data collection system (**col 3 lines 10-55, col 7 lines 1-13**).

Consider claim 10, (Previously Presented) Morales-Garza, modified by Lazaris-Brunner, discloses A down-link adapter according to claim 8 wherein said down-link adapter provides data to another adapter connected to a monitoring station (4) (**col 3 lines 10-55, col 7 lines 1-13**).

Consider claim 11, (Original) Morales-Garza, modified by Lazaris-Brunner, discloses An up-link adapter for converting signals received from a monitoring station (4) of a monitoring, measurement or data collection system, into signals suitable for digital up-link transmission as claimed in claim 2 (**col 3**

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lines 10-55, col 7 lines 1-13).

Consider claim 12, (Original) Morales-Garza, modified by Lazaris-Brunner, discloses An up-link adapter according to claim 11 for converting data message format from said monitoring station (4) to an up-link format of said satellite system and/or converting data rate to an uplink rate adapted to said satellite system (col 3 lines 10-55, col 7 lines 1-13).

Consider claim 13, (Previously Presented) Morales-Garza, modified by Lazaris-Brunner, discloses An up-link adapter according to claim 10 wherein said up- link adapter (5) receives data from another adapter such as a down-link adapter (7) (col 3 lines 10-55, col 7 lines 1-13).

Consider claim 15, (Original) Morales-Garza, modified by Lazaris-Brunner, further discloses A method according to claim 14 wherein said up-link broadcasting station (1) performs up-link broadcasting of data received from an up-link adapter (5) connected thereto (figure 1, col 3 lines 21-30, col 4 lines 28-40).

Consider claim 16, (Currently amended) Morales-Garza, modified by Lazaris-Brunner, discloses A method according to claim ~~42~~ 14 wherein said satellite system is a digital direct broadcast satellite system ((col 3 lines 30-55, col 4 lines 40-67).

Consider claim 17, (Original) Morales-Garza, modified by Lazaris-Brunner, discloses A method according to claim 14 wherein said broadcasting of the multiplexed data in down-link transmission is performed in time division multiplexing, TDM mode (col 3 lines 10-16).

Consider claim 18, (Original) Morales-Garza, modified by Lazaris-Brunner, discloses A method according to claim 14 wherein marker indexing is used in said down-link transmission as a synchronization signal (col 8 lines 25-27).

Consider claim 19, (Original) Morales-Garza, modified by Lazaris-Brunner, further discloses A method according to claim 18 wherein said synchronization is also used for sub-multiplexing up-link channels transmission (col 2 lines 10-47).

Consider claim 20, (Original) Morales-Garza, modified by Lazaris-Brunner, further discloses A method for interconnecting adapters (5; 7) as in claim 13, wherein data is returned from a down-link

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adapter (7) to an up-link adapter (5) transferring time information and/or data information between said adapters (5; 7) (col 1 lines 50-56, 64-67, col 2 lines 8-30).

Consider claim 21, (Previously Presented) Morales-Garza, modified by Lazaris-Brunner, further discloses A method for use in the adapter of claim 12 wherein a data message is delayed before being put into a next frame generated at a digital direct broadcast satellite channel rate, using a frame produced faster than needed by the rate of monitoring, measurement or data collection, thus giving rise to a so-called marker frame carrying data such as timing data (col 3 lines 10-55, col 7 lines 1-13).

Consider claim 22, (Previously Presented) Morales-Garza, modified by Lazaris-Brunner, further discloses A method for use in the adapter of claim 8 wherein data related to time and/or date is/are broadcast through a digital direct broadcast satellite system and wherein a frame received at a digital direct broadcast satellite channel rate, is converted into a message at a monitoring, measurement and data collection rate with the exception of a marker frame carrying data such as timing data (col 1 lines 50-56, 64-67, col 2 lines 8-30).

Consider claim 23, (Original) Morales-Garza, modified by Lazaris-Brunner, further discloses A method according to claim 22 wherein said timing data is used for evaluating transit time or for providing time to any other unit connected thereto such as a display (col 2 lines 35-45).

Consider claim 24, (Original) Morales-Garza, modified by Lazaris-Brunner, further discloses A method according to claim 23 wherein a transit time of a message from a time instant it is transmitted from an up-link adapter until a time instant it is received by a down-link adapter through a digital direct broadcast satellite is evaluated (col 2 lines 35-45, col 3 lines 10-55, col 7 lines 1-13).

Consider claim 25, (Original) Morales-Garza, modified by Lazaris-Brunner, further discloses A method according to claim 13 wherein a computation center (3) broadcasts through a digital direct broadcast satellite, to said monitoring stations (4) by means of an up-link adapter (5) incorporated therein and a monitoring station (4) having a down-link adapter (7) detects a channel specifically addressed thereto, providing data to said monitoring station, said data being usable for implementing a unicast, multicast or broadcast addressing scheme (col 4 lines 27-40, col 7 lines 1-33).

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUY C. HO whose telephone number is (571)270-1108. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Duc Nguyen/
Supervisory Patent Examiner, Art Unit 2617

